GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI, P.C. 280 N. OLD WOODWARD AVENUE, STE. 400, BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000

REMARKS

Claims 1 and 3-6 stand rejected under 35 USC §102(b) over U.S. Patent No. 6,138,144 to DeSimone. DeSimone resides in a method for managing multicast addresses for transmitting and receiving multimedia conferencing information on an internet protocol (IP) network implemented over an ATM network. The architecture allows client selection of which packets to receive based on the originator of the packets.

A multicast address resolution system (MARS) is used to identify receivers. The innovation appears to be a global MARS server that understands how to address each participant in a conference session.

Broadly, DeSimone is directed to optimizing normal multicast communications over non-IP (ATM) networks by consolidating into a global spot a MARS, Multicast Address Resolution System. This system knows each client network address to which traffic is to be sent – the innovation is to globalize this rather than put a MARS into each subnet.

Claim 1 has been amended to set forth that the instant invention includes one or more network routing modules (or router-embedded applets) operative to distribute messages based upon the *content thereof* (in addition to normal packet routing). This distinguishes over DeSimone is several significant ways:

DeSimone identifies destinations by address only – not by message content type (i.e. clients select which streams to accept) – according to the present invention, messages are routed based on logic in the FedHost – i.e. the router itself, not based on client logic or preference (although logic exists in the system to allow for this case);

(1) The routing fabric (i.e. Multicast) forwards all messages by destination address in DeSimone. In Applicant's system, some or all packets are actually NOT routed based on router logic which is keyed by packet content (interpreted by application-specific code or applets included in the router – code that in effect "understands" the meaning of the packet stream and uses that to affect routing/no routing decisions);

(2) There is no MRAL (Multicast Receive Address List) in our routers unless implemented in an application specific way by applet logic.

GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI, P.C. 280 N. OLD WOODWARD AVENUE, STE. 400, BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000

Thus, Applicant's system allows each client to send packets to all other clients in a network (i.e. to multicast), but dynamically allows the routing fabric to determine to which clients the traffic should go (for slowing or disconnecting particular clients), based on packet content itself. Each broadcaster would 'think' it was sending to all clients, and all clients would 'think' that they are getting everything, but the routing fabric would not route all data sent to all clients receiving based on logic that is internal to the router and is based on the requirements of the applications generating the traffic (i.e. this logic is inserted into the routers by the application developer).

The advantage of Applicant's approach over DiSimone is that clients do not need to understand anything about the network optimization. However, to accomplish this the routers must be application specific – i.e. they must know about network optimization.

Claims 7-9, 11 and 14-23 stand rejected under 35 USC §103(a) over DeSimone in view of Waters (5,841,980). It is believed that claims 7-9, which depend from claim 1, are allowing based upon the arguments above under 35 USC §102(b); that is, even if the DeSimone/Waters combination were legitimate, Applicant's invention would not result.

However, the DeSimone/Waters combination is without justification. Concerning claim 11, the Examiner argues that the DeSimone/Waters combination "makes sense" because it would result in "a more optimal interaction among its multiple users." However, this argument is too nebulous to constitute a sufficient grounds for rejection. The Examiner must provide a *reason* why one having ordinary skill in the pertinent art would have been led to combine the cited references to arrive at Applicant's claimed invention. There must be something *in the prior art* that suggests the proposed combination, other than the hindsight gained from knowledge that the inventor choose to combine these particular things in this particular way. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988). The Examiner is also required to make specific findings on a suggestion to combine prior-art references. In Re Dembeczak, 175 F.3d 994, 1000-01, 50 USPQ2d 1614, 1617-19 (Fed. Cir. 1999).

Although the Examiner argues that Waters represents analogous art, this in not really the case. Whereas Waters is optimized for computer gaming, DeSimone is optimized for multicast multimedia (i.e. video conferencing). Indeed, Waters addresses large-scale, multiplayer gaming, and calls for

GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI, P.C. 280 N. OLD WOODWARD AVENUE, STE. 400, BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000

dividing the game space (the virtual play board) into multiple zones, which can be served by a single server. This means that as the player moves about the playing field he is logically connect to the server for the specific zone in which his play is logically occurring. Such an architecture would be of no benefit to DeSimone which is directed to optimizing normal multicast communications over non-IP (ATM) networks. The point of novelty is knowing each client network address to which traffic is to be sent, rather than implement a multicast address resolution system each subnet.

In Applicant's system there are no fixed zones, and the zones are not associated with a particular simulation or game server. Note the limitation in claim 11 of "one or more routing modules or router-embedded applets that implement *application-specific* message culling..." As discussed above, this is markedly different that the DeSimone system and the proposed addition of Waters does not cure this deficiency. In contrast to the cited references, Applicant's routing fabric has "culling rules" it uses to determine if two players need to interact – these rules are game and game developer specific. They exist identically in every server that routes traffic and applied identically regardless of to which server a game client connects. Logically, all clients exist in the same unzoned game space, but traffic between a pair of clients is controlled by their relative positions (which is represented as data in the packets that could be sent from one to another – i.e. based on game-specific packet content).

Waters describes the old way multiplayer games are implemented on a fixed, or zoned space, while Applicant's invention implements games and simulations without a fixed zoned space using dynamic rules which can be used to create either fixed or dynamic zones of inclusion (or exclusion).

Claims 2, 10, 12 and 13 stand rejected under 35 USC §103(a) over DeSimone in view of Waters (5,841,980), and further in view of Lambright (6,015,348). Apart from the fact that there is no evidence *from the prior art* that suggests the proposed combination, Lambright, like DeSimone, uses fixed zones. In contrast, Applicant's does not use fixed zones at all. Lambright is a variation on the Waters idea of fixed zones that client connects to keep traffic to a particular processor below a fixed limit, but includes the idea that the zones (they call sectors managed by a sector manager) are dynamically created based on client traffic.

Based upon the foregoing amendments and comments, Applicant believes all claims are in condition for allowance. Questions regarding this application may be directed to the undersigned attorney by telephone, facsimile or electronic mail.

Respectfully submitted,

By: _____

John G. Posa
Reg. No. 37,424
Gifford, Krass, Groh, Sprinkle,
Anderson & Citkowski, PC
280 N. Old Woodward Ave., Ste 400
Birmingham, MI 48009
(734) 913-9300 FAX (734) 913-6007
Email: jposa@patlaw.com

Dated: January 21, 2005